

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/083,856	ALLEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dah-Wei D Yuan	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/14/04.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 27 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

**AQUEOUS BASED ELECTROLYTE SLURRY FOR MCFC AND METHOD OF USE**

Examiner: Yuan      S.N. 10/083,856      Art Unit: 1745      August 10, 2004

**Detailed Action**

1. The Applicant's amendment filed on June 14, 2004 was received. Claims 1,4,5 were amended. Claims 6-8 were added.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on March 9, 2004.

***Claim Rejections***

3. The claim rejections under 35 U.S.C. 102(b) as anticipated by Bregoli et al. on claims 1,4 are withdrawn because both independent claims have been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Bregoli et al. on claim 2 are withdrawn because the independent claim 1 has been amended. The claim rejections under 35 U.S.C. 103(a) as obvious over Bregoli et al. and Okabe et al. on claims 3,5 are withdrawn because the independent claims 1,4 have been amended.

***Reasons for Allowance***

4. Claims 1-8 are allowed. The invention of independent claim 1 recites a method for providing a electrolyte to a molten carbonate fuel cell comprising the steps of preparing an aqueous-based slurry paste of electrolyte, said aqueous-based slurry comprising solid electrolyte particles dispersed in a carrier vehicle, (b) spreading the slurry paste into the flow channels of

one or more bipolar plates, (c) drying the slurry paste, and (d) installing a current collector and electrode onto the flow channels of the bipolar plate. The closest prior art of record, Bregoli et al., teaches away the use of aqueous-based slurry as the electrolyte, because Bregoli et al. discloses the aqueous carrier is not suitable for use in the molten carbonate fuel cell. See Column 2, Lines 38-41. The invention of independent claim 4 recites a molten carbonate fuel cell comprising a cathode, an anode, and a packed bed of dried electrolyte, wherein the dried electrolyte is prepared by spreading an aqueous-based slurry of solid electrolyte particles dispersed in a carrier into at least one of the flow fields and drying the slurry. The closest prior art of record, Bregoli et al., teaches away the use of aqueous-based slurry as the electrolyte, because Bregoli et al. discloses the aqueous carrier is not suitable for use in the molten carbonate fuel cell.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Application/Control Number: 10/083,856

Page 3 of 3

Art Unit: 1745

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan  
August 10, 2004

A handwritten signature in cursive script, appearing to read "Dahwei Y", with a long horizontal flourish extending to the right.